

* * * * * STN Columbus * * * * *

FILE 'HOME' ENTERED AT 10:48:42 ON 27 FEB 2004

=> FILE REG

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

0.21

0.21

FILE 'REGISTRY' ENTERED AT 10:48:52 ON 27 FEB 2004

=> E TRANSGLUTAMINASE/CN

E1 1 TRANSGLUCOSIDASE L/CN

E2 1 TRANSGLUCOSYLASE/CN

E3 3 --> TRANSGLUTAMINASE/CN

E4 1 TRANSGLUTAMINASE (PHYSARUM POLYCEPHALUM)/CN

E5 1 TRANSGLUTAMINASE (ASTERINA PECTINIFERA CELL NUCLEUS-ASSOCIATED GENE NTG)/CN

E6 1 TRANSGLUTAMINASE (BACILLUS CEREUS STRAIN ATCC 14579 GENE BC3963)/CN

E7 1 TRANSGLUTAMINASE (BACILLUS HALODURANS STRAIN C-125 GENE TGL)/CN

E8 1 TRANSGLUTAMINASE (BACILLUS SUBTILIS GENE TGL)/CN

E9 1 TRANSGLUTAMINASE (BACILLUS SUBTILIS STRAIN AJ1307 CLONE PBST G75-11 GENE TGL)/CN

E10 1 TRANSGLUTAMINASE (CATTLE CLONE ABETG201)/CN

E11 1 TRANSGLUTAMINASE (CHICKEN CHONDROCYTE REDUCED)/CN

E12 1 TRANSGLUTAMINASE (CRASSOSTREA GIGAS CLONE PCGTG4)/CN

=> S E3

L1 3 TRANSGLUTAMINASE/CN

=> D 1-3

L1 ANSWER 1 OF 3 REGISTRY COPYRIGHT 2004 ACS on STN

RN 137741-97-0 REGISTRY

CN Blood-coagulation factor XIIIa, blood platelet-derived (9CI) (CA INDEX NAME)

OTHER NAMES:

CN **Transglutaminase**

MF Unspecified

CI MAN

SR CA

LC STN Files: ADISNEWS, AGRICOLA, BIOSIS, CA, CAPLUS, CIN, PIRA, PROMT, TOXCENTER, USPATFULL

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

14 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

14 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L1 ANSWER 2 OF 3 REGISTRY COPYRIGHT 2004 ACS on STN

RN 80146-85-6 REGISTRY

CN Glutamyltransferase, glutaminylopeptide γ - (9CI) (CA INDEX NAME)

OTHER NAMES:

CN Activa

CN Activa MP

CN Activa Supercurd

CN Activa TG

CN Activa TG-K

CN Activa TG-M

CN Activa TG-S

CN Activa TG-TI

CN Activa WM

CN Akuthiba TG-S

CN E.C. 2.3.2.13
CN Glutaminylpeptide γ -glutamyltransferase
CN Koshikeep
CN Polyamine transglutaminase
CN PPQ 6117
CN Tissue transglutaminase
CN **Transglutaminase**
DR 300711-04-0
MF Unspecified
CI MAN
LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, BIOBUSINESS, BIOSIS, BIOTECHNO,
CA, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS, CHEMLIST, CIN, EMBASE,
MSDS-OHS, PIRA, PROMT, RTECS*, TOXCENTER, USPAT2, USPATFULL
(*File contains numerically searchable property data)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

3013 REFERENCES IN FILE CA (1907 TO DATE)

29 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

3016 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L1 ANSWER 3 OF 3 REGISTRY COPYRIGHT 2004 ACS on STN
RN 9067-75-8 REGISTRY
CN Blood-coagulation factor XIIIa (9CI) (CA INDEX NAME)

OTHER NAMES:

CN Activated blood-coagulation factor XIII
CN Activated coagulation factor XIII
CN Blood-coagulation factor XIII, activated
CN Fibrin-crosslinking enzyme
CN Fibrinolyase
CN **Transglutaminase**

MF Unspecified

CI MAN

LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, BIOSIS, BIOTECHNO, CA, CAPLUS,
CIN, EMBASE, PIRA, PROMT, TOXCENTER, USPATFULL

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

537 REFERENCES IN FILE CA (1907 TO DATE)

7 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

538 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> E TRANSGLUTAMINASE/CN

E1 1 TRANSGLUCOSIDASE L/CN
E2 1 TRANSGLUCOSYLASE/CN
E3 3 --> TRANSGLUTAMINASE/CN
E4 1 TRANSGLUTAMINASE (PHYSARUM POLYCEPHALUM)/CN
E5 1 TRANSGLUTAMINASE (ASTERINA PECTINIFERA CELL NUCLEUS-ASSOCIATED GENE NTG)/CN
E6 1 TRANSGLUTAMINASE (BACILLUS CEREUS STRAIN ATCC 14579 GENE BC3963)/CN
E7 1 TRANSGLUTAMINASE (BACILLUS HALODURANS STRAIN C-125 GENE TGL)/CN
E8 1 TRANSGLUTAMINASE (BACILLUS SUBTILIS GENE TGL)/CN
E9 1 TRANSGLUTAMINASE (BACILLUS SUBTILIS STRAIN AJ1307 CLONE PBST G75-11 GENE TGL)/CN
E10 1 TRANSGLUTAMINASE (CATTLE CLONE ABETG201)/CN
E11 1 TRANSGLUTAMINASE (CHICKEN CHONDROCYTE REDUCED)/CN
E12 1 TRANSGLUTAMINASE (CRASSOSTREA GIGAS CLONE PCGTG4)/CN

=>

=> E

E13 1 TRANSGLUTAMINASE (CYPRINUS CARPIO)/CN
E14 1 TRANSGLUTAMINASE (DE-1-METHIONINE) (CRASSOSTREA GIGAS CLONE PCGTG4)/CN
E15 1 TRANSGLUTAMINASE (DIROFILARIA IMMITIS GENE DITG PRECURSOR)/C

N

E16 1 TRANSGLUTAMINASE (GUINEA PIG LIVER CLONE PLTG-4)/CN
 E17 1 TRANSGLUTAMINASE (HUMAN BRAIN SEQUENCE HOMOLOG 9)/CN
 E18 1 TRANSGLUTAMINASE (HUMAN CLONE 1 GENE TGM1)/CN
 E19 1 TRANSGLUTAMINASE (HUMAN CLONE RP4-734P14 GENE DJ734P14.3)/CN
 E20 1 TRANSGLUTAMINASE (HUMAN EPIDERMIS CLONE PHETG-M)/CN
 E21 1 TRANSGLUTAMINASE (HUMAN HEL CELL CLONE BF4 TISSUE ISOENZYME
 TGH2 REDUCED)/CN
 E22 1 TRANSGLUTAMINASE (HUMAN HEL CLONE BF15/BF1 TISSUE-TYPE REDUC
 ED)/CN
 E23 1 TRANSGLUTAMINASE (HUMAN PROSTATE-RESTRICTED REDUCED) (E.C.2.3
 .2.13)/CN
 E24 1 TRANSGLUTAMINASE (LIMULUS POLYPHEMUS) (EC 2.3.2.13)/CN

=> E

E25 1 TRANSGLUTAMINASE (ONCORHYNCHUS KETA CLONE PCLTGA3 679 AMINO
 ACIDS)/CN
 E26 1 TRANSGLUTAMINASE (ONCORHYNCHUS KETA CLONE PCLTGA3 680 AMINO
 ACIDS)/CN
 E27 1 TRANSGLUTAMINASE (ONCORHYNCHUS KETA CLONE PCLTGA4 679 AMINO
 ACIDS)/CN
 E28 1 TRANSGLUTAMINASE (ONCORHYNCHUS KETA CLONE PCLTGA4 680 AMINO
 ACIDS)/CN
 E29 1 TRANSGLUTAMINASE (PACIFASTACUS LENIUSCULUS HEMOCYTE)/CN
 E30 1 TRANSGLUTAMINASE (PAGRUS MAJOR CLONE PSLTG5 TISSUE-TYPE ISOE
 NZYME)/CN
 E31 1 TRANSGLUTAMINASE (PARALICHTHYS OLIVACEUS CLONE PFLTGT21 687 A
 MINO ACIDS)/CN
 E32 1 TRANSGLUTAMINASE (PARALICHTHYS OLIVACEUS CLONE PFLTGT21 688 A
 MINO ACIDS)/CN
 E33 1 TRANSGLUTAMINASE (PARALICHTHYS OLIVACEUS LIVER CLONE PFLTGT)/
 CN
 E34 1 TRANSGLUTAMINASE (PARGUS MAJOR LIVER CLONE PSLTG5 694 AMINO
 ACIDS)/CN
 E35 1 TRANSGLUTAMINASE (PARGUS MAJOR LIVER CLONE PSLTG5 695 AMINO
 ACIDS)/CN
 E36 1 TRANSGLUTAMINASE (PARGUS MAJOR LIVER CLONE PSLTG5)/CN

=> E

E37 1 TRANSGLUTAMINASE (SALMON) (EC 2.3.2.13)/CN
 E38 1 TRANSGLUTAMINASE (SHEWANELLA ONEIDENSIS STRAIN MR-1 GENE SO1
 405)/CN
 E39 1 TRANSGLUTAMINASE (SHEWANELLA ONEIDENSIS STRAIN MR-1 GENE SO2
 150)/CN
 E40 1 TRANSGLUTAMINASE (STREPTOMYCES CINNAMONEUM STRAIN CBS 683.68
)/CN
 E41 1 TRANSGLUTAMINASE (STREPTOMYCES CINNAMONEUS ALBOSPORUS STRAIN
 CBS 683.68 PRECURSOR)/CN
 E42 1 TRANSGLUTAMINASE (STREPTOMYCES MOBARAENSIS)/CN
 E43 1 TRANSGLUTAMINASE (STREPTOVERTICILLIUM CINNAMONEUM)/CN
 E44 1 TRANSGLUTAMINASE (STREPTOVERTICILLIUM MOBARAENSE STRAIN S-81
 12 CLONE ATG1)/CN
 E45 3 TRANSGLUTAMINASE (STREPTOVERTICILLIUM MOBARAENSE)/CN
 E46 1 TRANSGLUTAMINASE (STREPTOVERTICILLIUM STRAIN S-8112) (E.C. 2
 .3.2.13)/CN
 E47 1 TRANSGLUTAMINASE (SYNTHETIC STREPTOVERTICILLIUM GENE MTG)/CN
 E48 1 TRANSGLUTAMINASE (THERAGRA CHALCOGRAMMA LIVER CLONE PALTG8)/
 CN

=> E

E49 1 TRANSGLUTAMINASE (THERAGRA CHALCOGRAMMA MUSCLE CLONE PALTG8)
 /CN
 E50 1 TRANSGLUTAMINASE 1 (HUMAN 816-AMINO ACIDS) (E.C. 2.3.2.13)/C
 N
 E51 1 TRANSGLUTAMINASE 1 (K POLYPEPTIDE EPIDERMAL TYPE I, PROTEIN-

GLUTAMINE-GAMMA-GLUTAMYLTRANSFERASE) (HUMAN CLONE MGC:21358
IMAGE:4747045)/CN
E52 1 TRANSGLUTAMINASE 1, K POLYPEPTIDE (MOUSE STRAIN FVB/N CLONE
MGC:31305 IMAGE:4221991)/CN
E53 1 TRANSGLUTAMINASE 2, C POLYPEPTIDE (MOUSE STRAIN NMRI CLONE M
GC:6152 IMAGE:3256943)/CN
E54 1 TRANSGLUTAMINASE 4 (PROSTATE) (HUMAN CLONE MGC:12298 IMAGE:3
950865)/CN
E55 1 TRANSGLUTAMINASE ACTIVE SITE-CONTAINING PROTEIN 9 (HUMAN CLO
NE PBS-0397H02)/CN
E56 1 TRANSGLUTAMINASE FAMILY PROTEIN (MYCOBACTERIUM TUBERCULOSIS
STRAIN CDC1551 GENE MT2642)/CN
E57 1 TRANSGLUTAMINASE PREPRO- (STREPTOMYCES CINNAMONEUM STRAIN CB
S 683.68)/CN
E58 1 TRANSGLUTAMINASE PRO- (STREPTOMYCES CINNAMONEUM STRAIN CBS 6
83.68)/CN
E59 1 TRANSGLUTAMINASE SUBSTRATE AND WAP MOTIF-CONTG. PROTEIN 4 (C
ATTLE FRAGMENT REDUCED)/CN
E60 1 TRANSGLUTAMINASE SUBSTRATE AND WAP MOTIF-CONTG. PROTEIN 5 (C
ATTLE FRAGMENT REDUCED)/CN

=> S E51-52

1 "TRANSGLUTAMINASE 1 (K POLYPEPTIDE EPIDERMAL TYPE I, PROTEIN-GLU
TAMINE-GAMMA-GLUTAMYLTRANSFERASE) (HUMAN CLONE MGC:21358 IMAGE:4
747045)"/CN
1 "TRANSGLUTAMINASE 1, K POLYPEPTIDE (MOUSE STRAIN FVB/N CLONE
MGC:31305 IMAGE:4221991)"/CN
L2 2 ("TRANSGLUTAMINASE 1 (K POLYPEPTIDE EPIDERMAL TYPE I, PROTEIN-GL
UTAMINE-GAMMA-GLUTAMYLTRANSFERASE) (HUMAN CLONE MGC:21358 IMAGE:
4747045)"/CN OR "TRANSGLUTAMINASE 1, K POLYPEPTIDE (MOUSE STRAIN
FVB/N CLONE MGC:31305 IMAGE:4221991)"/CN)

=> S E50

L3 1 "TRANSGLUTAMINASE 1 (HUMAN 816-AMINO ACIDS) (E.C. 2.3.2.13)"/CN

=> SET EXPAND CONT
SET COMMAND COMPLETED

=> SEL L1 2 NAME
E61 THROUGH E77 ASSIGNED

=> SEL L2 NAME
E78 THROUGH E83 ASSIGNED

=> SEL L3 NAME
E84 THROUGH E85 ASSIGNED

=> INDEX BIOSCIENCE
FILE 'DRUGMONOG' ACCESS NOT AUTHORIZED
COST IN U.S. DOLLARS

	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	25.49	25.70

INDEX 'ADISCTI, ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, AQUASCI, BIOBUSINESS,
BIOCOMMERCE, BIOSIS, BIOTECHABS, BIOTECHDS, BIOTECHNO, CABA, CANCERLIT,
CAPLUS, CEABA-VTB, CEN, CIN, CONFSCI, CROPB, CROPU, DISSABS, DDFB, DDFU,
DGENE, DRUGB, DRUGMONOG2, ...' ENTERED AT 10:50:48 ON 27 FEB 2004

68 FILES IN THE FILE LIST IN STNINDEX

Enter SET DETAIL ON to see search term postings or to view
search error messages that display as 0* with SET DETAIL OFF.

=> S E61-85

29 FILE ADISCTI

1 FILES SEARCHED...
3 FILE ADISINSIGHT
4 FILE ADISNEWS
256 FILE AGRICOLA
4 FILES SEARCHED...
39 FILE ANABSTR
123 FILE AQUASCI
115 FILE BIOBUSINESS
37 FILE BIOCOMMERCE
8 FILES SEARCHED...
4327 FILE BIOSIS
9 FILES SEARCHED...
272 FILE BIOTECHABS
272 FILE BIOTECHDS
1424 FILE BIOTECHNO
12 FILES SEARCHED...
423 FILE CABA
847 FILE CANCERLIT
14 FILES SEARCHED...
4082 FILE CAPLUS
15 FILES SEARCHED...
80 FILE CEABA-VTB
1 FILE CEN
15 FILE CIN
221 FILE CONFSCI
19 FILES SEARCHED...
6 FILE CROPU
21 FILES SEARCHED...
172 FILE DISSABS
48 FILE DDFB
23 FILES SEARCHED...
198 FILE DDFU
2343 FILE DGENE
25 FILES SEARCHED...
48 FILE DRUGB
3 FILE DRUGMONOG2
27 FILES SEARCHED...
7 FILE IMSDRUGNEWS
293 FILE DRUGU
7 FILE IMSRESEARCH
30 FILES SEARCHED...
39 FILE EMBAL
2758 FILE EMBASE
32 FILES SEARCHED...
1476 FILE ESBIODBASE
33 FILES SEARCHED...
121 FILE FEDRIP
3 FILE FOMAD
35 FILES SEARCHED...
6 FILE FOREGE
603 FILE FROSTI
455 FILE FSTA
38 FILES SEARCHED...
1931 FILE GENBANK
2 FILE HEALSAFE
319 FILE IFIPAT
41 FILES SEARCHED...
76 FILE IMSPRODUCT
550 FILE JICST-EPLUS
43 FILES SEARCHED...
104 FILE KOSMET
792 FILE LIFESCI
45 FILES SEARCHED...
3 FILE MEDICONF
3726 FILE MEDLINE

47 FILES SEARCHED...
 16 FILE NIOSHTIC
 18 FILE NTIS
 49 FILES SEARCHED...
 29 FILE OCEAN
 9931 FILE PASCAL
 52 FILES SEARCHED...
 7 FILE PHAR
 1 FILE PHARMAML
 42 FILE PHIN
 358 FILE PROMT
 58 FILES SEARCHED...
 6 FILE RDISCLOSURE
 4286 FILE SCISEARCH
 60 FILES SEARCHED...
 1 FILE SYNTHLINE
 1379 FILE TOXCENTER
 62 FILES SEARCHED...
 1415 FILE USPATFULL
 63 FILES SEARCHED...
 96 FILE USPAT2
 64 FILES SEARCHED...
 7 FILE VETU
 66 FILES SEARCHED...
 644 FILE WPIDS
 67 FILES SEARCHED...
 644 FILE WPINDEX

63 FILES HAVE ONE OR MORE ANSWERS, 68 FILES SEARCHED IN STNINDEX

L4 QUE ("ACTIVA MP"/BI OR "ACTIVA SUPERCURD"/BI OR "ACTIVA TG-K"/BI OR "ACTIV
 A TG-M"/BI OR "ACTIVA TG-S"/BI OR "ACTIVA TG-TI"/BI OR "ACTIVA TG"/BI
 OR "ACTIVA WM"/BI OR ACTIVA/B I OR "AKUTHIBA TG-S"/BI OR "E.C. 2.3.2.13
 "/BI OR "GLUTAMINYLPETIDE Γ-GLUTAMYLTRANSFERASE"/BI OR KOSHIKEE
 P/B I OR "POLYAMINE TRANSGLUTAMINASE"/BI OR "PPQ 6117"/BI OR "TISSUE TR
 ANSGLUTAMINASE"/BI OR TRANSGLUTAMINASE/B I OR "GENBANK AAH26422 (TRANSL
 ATED FROM: GENBANK BC026422)"/BI OR "GENBANK AAH26422"/BI OR "GENBANK
 AAH34699 (TRANSLATED FROM: GENBANK BC034699)"/BI OR "GENBANK AAH34699"
 /BI OR "TRANSGLUTAMINASE 1 (K POLYPEPTIDE EPIDERMAL TYPE I, PROTEIN-GL
 UTAMINE-GAMMA-GLUTAMYLTRANSFERASE) (HUMAN CLONE MGC:21358 IMAGE:474704
 5)"/BI OR "TRANSGLUTAMINASE 1, K POLYPEPTIDE (MOUSE STRAIN FVB/N CLONE
 MGC:31305 IMAGE:4221991)"/BI OR "GLUTAMYLTRANSFERASE, GLUTAMINYLPETI
 DE Γ- (HUMAN ISOENZYME 1 REDUCED)"/BI OR "TRANSGLUTAMINASE 1 (HU
 MAN 816-AMINO ACIDS) (E.C. 2.3.2.13)"/BI)

=> s (slv or synthetic lipid vesicle or lipid vesicle)

16 FILE ADISCTI
 22 FILE ADISINSIGHT
 97 FILE AGRICOLA
 14 FILE ANABSTR
 47 FILE AQUASCI
 78 FILE BIOBUSINESS
 24 FILE BIOCERMERCE
 3296 FILE BIOSIS
 66 FILE BIOTECHABS
 66 FILE BIOTECHDS
 1022 FILE BIOTECHNO
 215 FILE CABA
 213 FILE CANCERLIT
 3198 FILE CAPLUS
 41 FILE CEABA-VTB
 8 FILE CEN
 26 FILE CIN
 56 FILE CONFSCI
 11 FILE CROPU

210 FILE DISSABS
23 FILE DDFB
23 FILES SEARCHED...
141 FILE DDFU
112 FILE DGENE
23 FILE DRUGB
3 FILE DRUGMONOG2
13 FILE IMSDRUGNEWS
228 FILE DRUGU
18 FILE IMSRESEARCH
13 FILE EMBAL

31 FILES SEARCHED...
2458 FILE EMBASE
766 FILE ESBIODBASE
32 FILE FEDRIP
9 FILE FOREGE
18 FILE FROSTI
219 FILE FSTA
202 FILE GENBANK
2 FILE HEALSAFE
416 FILE IFIPAT
89 FILE JICST-EPLUS
13 FILE KOSMET
702 FILE LIFESCI
2002 FILE MEDLINE
10 FILE NIOSHTIC
83 FILE NTIS

49 FILES SEARCHED...
9 FILE OCEAN
759 FILE PASCAL
17 FILE PHAR
3 FILE PHARMAML
31 FILE PHIN
499 FILE PROMT
2 FILE RDISCLOSURE
2412 FILE SCISEARCH
5 FILE SYNTHLINE
916 FILE TOXCENTER
3312 FILE USPATFULL
171 FILE USPAT2
3 FILE VETU
332 FILE WPIDS

67 FILES SEARCHED...
332 FILE WPINDEX

59 FILES HAVE ONE OR MORE ANSWERS, 68 FILES SEARCHED IN STNINDEX

L5 QUE (SLV OR SYNTHETIC LIPID VESICLE OR LIPID VESICLE)

=> s 14 (1)15
1 FILES SEARCHED...
4 FILES SEARCHED...
8 FILES SEARCHED...
6 FILE BIOSIS
9 FILES SEARCHED...
1 FILE BIOTECHABS
1 FILE BIOTECHDS
3 FILE BIOTECHNO
12 FILES SEARCHED...
13 FILES SEARCHED...
1 FILE CANCERLIT
14 FILES SEARCHED...
7 FILE CAPLUS
15 FILES SEARCHED...
1 FILE CIN

19 FILES SEARCHED...
 21 FILES SEARCHED...
 22 FILES SEARCHED...
 24 FILES SEARCHED...
 25 FILES SEARCHED...
 27 FILES SEARCHED...
 29 FILES SEARCHED...
 30 FILES SEARCHED...
 4 FILE EMBASE
 32 FILES SEARCHED...
 3 FILE ESBIODBASE
 33 FILES SEARCHED...
 2 FILE FEDRIP
 34 FILES SEARCHED...
 39 FILES SEARCHED...
 41 FILES SEARCHED...
 43 FILES SEARCHED...
 1 FILE LIFESCI
 45 FILES SEARCHED...
 4 FILE MEDLINE
 47 FILES SEARCHED...
 49 FILES SEARCHED...
 51 FILES SEARCHED...
 52 FILES SEARCHED...
 58 FILES SEARCHED...
 5 FILE SCISEARCH
 60 FILES SEARCHED...
 2 FILE TOXCENTER
 62 FILES SEARCHED...
 20 FILE USPATFULL
 63 FILES SEARCHED...
 64 FILES SEARCHED...
 66 FILES SEARCHED...
 2 FILE WPIDS
 67 FILES SEARCHED...
 2 FILE WPINDEX

17 FILES HAVE ONE OR MORE ANSWERS, 68 FILES SEARCHED IN STNINDEX

L6 QUE L4 (L) L5

=> d rank

F1	20	USPATFULL
F2	7	CAPLUS
F3	6	BIOSIS
F4	5	SCISEARCH
F5	4	EMBASE
F6	4	MEDLINE
F7	3	BIOTECHNO
F8	3	ESBIODBASE
F9	2	FEDRIP
F10	2	TOXCENTER
F11	2	WPIDS
F12	2	WPINDEX
F13	1	BIOTECHABS
F14	1	BIOTECHDS
F15	1	CANCERLIT
F16	1	CIN
F17	1	LIFESCI

=> file hits

COST IN U.S. DOLLARS

FULL ESTIMATED COST

SINCE FILE

ENTRY

37.62

TOTAL

SESSION

63.32

FILE 'USPATFULL' ENTERED AT 11:30:19 ON 27 FEB 2004
CA INDEXING COPYRIGHT (C) 2004 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'CAPLUS' ENTERED AT 11:30:19 ON 27 FEB 2004
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2004 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'BIOSIS' ENTERED AT 11:30:19 ON 27 FEB 2004
COPYRIGHT (C) 2004 BIOLOGICAL ABSTRACTS INC.(R)

FILE 'SCISEARCH' ENTERED AT 11:30:19 ON 27 FEB 2004
COPYRIGHT 2004 THOMSON ISI

FILE 'EMBASE' ENTERED AT 11:30:19 ON 27 FEB 2004
COPYRIGHT (C) 2004 Elsevier Inc. All rights reserved.

FILE 'MEDLINE' ENTERED AT 11:30:19 ON 27 FEB 2004

FILE 'BIOTECHNO' ENTERED AT 11:30:19 ON 27 FEB 2004
COPYRIGHT (C) 2004 Elsevier Science B.V., Amsterdam. All rights reserved.

FILE 'ESBIOBASE' ENTERED AT 11:30:19 ON 27 FEB 2004
COPYRIGHT (C) 2004 Elsevier Science B.V., Amsterdam. All rights reserved.

FILE 'FEDRIP' ENTERED AT 11:30:19 ON 27 FEB 2004

FILE 'TOXCENTER' ENTERED AT 11:30:19 ON 27 FEB 2004
COPYRIGHT (C) 2004 ACS

FILE 'WPIDS' ENTERED AT 11:30:19 ON 27 FEB 2004
COPYRIGHT (C) 2004 THOMSON DERWENT

FILE 'WPINDEX' ACCESS NOT AUTHORIZED

FILE 'BIOTECHABS' ACCESS NOT AUTHORIZED

FILE 'BIOTECHDS' ENTERED AT 11:30:19 ON 27 FEB 2004
COPYRIGHT (C) 2004 THOMSON DERWENT AND INSTITUTE FOR SCIENTIFIC INFORMATION

FILE 'CANCERLIT' ENTERED AT 11:30:19 ON 27 FEB 2004

FILE 'CIN' ENTERED AT 11:30:19 ON 27 FEB 2004
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2004 American Chemical Society (ACS)

FILE 'LIFESCI' ENTERED AT 11:30:19 ON 27 FEB 2004
COPYRIGHT (C) 2004 Cambridge Scientific Abstracts (CSA)

=> s 16

1 FILES SEARCHED...
2 FILES SEARCHED...
3 FILES SEARCHED...
4 FILES SEARCHED...
5 FILES SEARCHED...
6 FILES SEARCHED...
7 FILES SEARCHED...
8 FILES SEARCHED...
9 FILES SEARCHED...
10 FILES SEARCHED...
11 FILES SEARCHED...
13 FILES SEARCHED...

L7 62 L6

=> dup rem l7

DUPLICATE IS NOT AVAILABLE IN 'FEDRIP'.

ANSWERS FROM THESE FILES WILL BE CONSIDERED UNIQUE
PROCESSING COMPLETED FOR L7

L8 31 DUP REM L7 (31 DUPLICATES REMOVED)
ANSWERS '1-20' FROM FILE USPATFULL
ANSWERS '21-27' FROM FILE CAPLUS
ANSWER '28' FROM FILE SCISEARCH
ANSWERS '29-30' FROM FILE FEDRIP
ANSWER '31' FROM FILE CIN

=> d bib abs 1-28

L8 ANSWER 1 OF 31 USPATFULL on STN DUPLICATE 6
AN 94:102222 USPATFULL
TI Localized delivery using fibronectin conjugates
IN Weiner, Alan L., Plainsboro, NJ, United States
Lenk, Robert P., Lambertville, NJ, United States
Carpenter-Green, Sharon S., Cranbury, NJ, United States
Fountain, Michael W., Plainsboro, NJ, United States
PA The Liposome Company, Inc., Princeton, NJ, United States (U.S.
corporation)
PI US 5366958 19941122
AI US 1993-110193 19930820 (8)
RLI Continuation of Ser. No. US 1990-611336, filed on 9 Nov 1990, now
abandoned which is a continuation of Ser. No. US 1983-533583, filed on
19 Sep 1983, now abandoned
DT Utility
FS Granted
EXNAM Primary Examiner: Stone, Jacqueline
LREP Bloom, Allen, Feeney, Joanne Longo
CLMN Number of Claims: 25
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 838
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB This invention encompasses new and substantially improved methods and
compositions for delivery of therapeutic agents to specifically chosen
body sites. Conjugation of fibronectin to bioactive agents or to lipids
or to liposomes which entrap the bioactive agents permits immobilization
of the bioactive agent when administered at collagen-, heparin-,
hyaluronic acid-, fibrin/fibrinogen-, or ganglioside-rich sites.
Covalent conjugation is achieved by two methods: (1) the enzymatically
catalyzed cross-linkage of fibronectin to an amine containing compound,
and (2) by a modified NHS method which permits formation of peptide
bonds between fibronectin and lipid compounds.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L8 ANSWER 2 OF 31 USPATFULL on STN
AN 2004:50383 USPATFULL
TI Compositions and methods for enhanced mucosal delivery of interferon
beta
IN Quay, Steven C., Edmonds, WA, UNITED STATES
Gupta, Malini, Dix Hills, NY, UNITED STATES
de Meireles, Jorge C., Syosset, NY, UNITED STATES
Abd El-Shafy, Mohammed, Hauppauge, NY, UNITED STATES
PA Nastech Pharmaceutical Company Inc. (U.S. corporation)
PI US 2004037809 A1 20040226
AI US 2003-462452 A1 20030616 (10)
PRAI US 2002-393066P 20020628 (60)
DT Utility
FS APPLICATION

LREP PAUL G. LUNN, ESQ. NASTECH PHARMACEUTICAL COMPANY, INC., 3450 MONTE
VILLA PARKWAY, BOTHELL, WA, 98021-8906
CLMN Number of Claims: 57
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 10725
AB Compositions and methods are provided for intranasal delivery of
interferon- β yielding improved pharmacokinetic and pharmacodynamic
results. In certain aspects of the invention, the interferon- β is
delivered to the intranasal mucosa along with one or more intranasal
delivery-enhancing agent(s) to yield substantially increased absorption
and/or bioavailability of the interferon- β and/or a substantially
decreased time to maximal concentration of interferon- β in a tissue
of a subject as compared to controls where the interferon- β is
administered to the same intranasal site alone or formulated according
to previously disclosed reports. The enhancement of intranasal delivery
of interferon- β according to the methods and compositions of the
present invention allows for the effective pharmaceutical use of these
agents to treat a variety of diseases and conditions in mammalian
subjects.

L8 ANSWER 3 OF 31 USPTF on STN
AN 2004:38077 USPTF
TI Dopamine agonist formulations for enhanced central nervous system
delivery
IN Quay, Steven C., Edmonds, WA, UNITED STATES
PA Nastech Pharmaceutical Company Inc, Hauppauge, NY (U.S. corporation)
PI US 2004028613 A1 20040212
AI US 2001-891630 A1 20010625 (9)
DT Utility
FS APPLICATION
LREP TOWNSEND AND TOWNSEND AND CREW, LLP, TWO EMBARCADERO CENTER, EIGHTH
FLOOR, SAN FRANCISCO, CA, 94111-3834
CLMN Number of Claims: 58
ECL Exemplary Claim: 1
DRWN 1 Drawing Page(s)
LN.CNT 8045
AB Pharmaceutical formulations are described comprising at least one
dopamine receptor agonist and one or more mucosal delivery-enhancing
agents for enhanced mucosal delivery of the dopamine receptor agonist.
In one aspect, the mucosal delivery formulations and methods provide
enhanced delivery of the dopamine receptor agonist to the central
nervous system (CNS), for example by yielding dopamine receptor agonist
concentrations in the cerebral spinal fluid of 5% or greater of the peak
dopamine agonist concentrations in the blood plasma following
administration to a mammalian subject. Exemplary formulations and
methods within the invention utilize apomorphine as the dopamine
receptor agonist. Other exemplary methods and formulations focus in
intranasal administration of a dopamine receptor agonist. The
formulations and methods of the invention are useful for treating a
variety of diseases and conditions in mammalian subjects, including
Parkinson's disease, male erectile dysfunction, female sexual
dysfunction, among others. In alternate aspects, the mucosal delivery
formulations and methods of the invention include one, or any
combination of, mucosal delivery-enhancing agents selected from (a)
aggregation inhibitory agents; (b) charge modifying agents; (c) pH
control agents; (d) degradative enzyme inhibitors; (e) mucolytic or
mucus clearing agents; (f) ciliostatic agents; (g) membrane
penetration-enhancing agents; (h) modulatory agents of epithelial
junction physiology; (i) vasodilator agents; (j) selective
transport-enhancing agents; and (k) stabilizing delivery vehicles,
carriers, supports or complex-forming agents. These methods and
formulations of the invention provide for significantly enhanced
absorption of dopamine receptor agonists into or across a nasal mucosal

barrier to a target site of action, for example the CNS.

L8 ANSWER 4 OF 31 USPTAFULL on STN
AN 2004:31718 USPTAFULL
TI Methods and compositions for inhibiting neoplastic cell growth
IN Yen, Frances, San Diego, CA, UNITED STATES
Denison, Blake, San Diego, CA, UNITED STATES
Duclert, Aymeric, Saint-Maur, FRANCE
Bougueleret, Lydie, Petit Lancy, SWITZERLAND
Clusel, Catherine, Montreuil-sous-Bois, FRANCE
Dumas Milne-Edwards, Jean-Baptiste, Paris, FRANCE
Bihain, Bernard, Encinitas, CA, UNITED STATES
Bour, Barbara, San Diego, CA, UNITED STATES
Ebbets-Reed, Dana, Encinitas, CA, UNITED STATES
Salter-Cid, Luisa, San Diego, CA, UNITED STATES
PA GENSET, S.A., Paris, FRANCE (U.S. corporation)
PI US 2004023860 A1 20040205
AI US 2002-121034 A1 20020411 (10)
RLI Division of Ser. No. US 2000-750580, filed on 28 Dec 2000, GRANTED, Pat.
No. US 6455280 Continuation-in-part of Ser. No. US 2000-599362, filed on
21 Jun 2000, ABANDONED Continuation-in-part of Ser. No. US 1999-469099,
filed on 21 Dec 1999, ABANDONED
PRAI WO 2000-IB101 20000621
WO 1999-IB2058 19991220
US 1998-113686P 19981222 (60)
US 1999-141032P 19990625 (60)
DT Utility
FS APPLICATION
LREP John Lucas, Ph.D., J.D., GENSET CORP., 10665 Sorrento Valley Road, San
Diego, CA, 92121-1609
CLMN Number of Claims: 11
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 10944
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The invention provides the genomic sequence of GSSP-2, GSSP-2 cDNAs and
GSSP-2 polypeptides. Further the invention provides polynucleotides
including biallelic markers derived from the GSSP-2 gene and from
genomic regions flanking the gene. This invention also provides
polynucleotides and methods suitable for genotyping a nucleic acid
molecule containing sample for one or more biallelic markers of the
invention. Further, the invention provides methods to detect a
statistical correlation between a biallelic marker allele and a
phenotype and/or between a biallelic marker haplotype and a phenotype.
The invention also concerns methods and compositions for killing
neoplastic cells or inhibiting neoplastic cell growth. In particular,
the present invention concerns cell proliferation arresting/inhibiting
and apoptosis/necrosis inducing compositions and methods for the
treatment of tumors. The present invention is directed to novel
polypeptides and to nucleic acid molecules encoding those polypeptides.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L8 ANSWER 5 OF 31 USPTAFULL on STN
AN 2004:30701 USPTAFULL
TI Regulation of cell proliferation and differentiation using topically
applied peptides
IN Holick, Michael F., Sudbury, MA, UNITED STATES
PI US 2004022838 A1 20040205
AI US 2003-311366 A1 20030528 (10)
WO 2001-US19650 20010620
DT Utility
FS APPLICATION
LREP STERNE, KESSLER, GOLDSTEIN & FOX PLLC, 1100 NEW YORK AVENUE, N.W.,

WASHINGTON, DC, 20005

CLMN Number of Claims: 24

ECL Exemplary Claim: 1

DRWN 3 Drawing Page(s)

LN.CNT 1368

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Methods are disclosed for the regulation of cell differentiation and proliferation, e.g., for treating hyperproliferative skin disorders, such as psoriasis, for enhancing wound healing, for stimulating hair growth and inhibiting hair growth, by topical administration of parathyroid hormone (PTH), parathyroid related peptide (PTHrP), or fragment, analog or derivative thereof, and salts thereof, encapsulated by liposomes.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L8 ANSWER 6 OF 31 USPATFULL on STN

AN 2003:318741 USPATFULL

TI Expression system for ABC transporters

IN Molday, Robert S., Vancouver, CANADA

Ahn, Jinhi, Vancouver, CANADA

Hauswirth, William S., Gainesville, FL, UNITED STATES

PI US 2003224485 A1 20031204

AI US 2003-431323 A1 20030506 (10)

PRAI CA 2002-2385110 20020506

US 2002-391644P 20020627 (60)

DT Utility

FS APPLICATION

LREP CHRISTENSEN, O'CONNOR, JOHNSON, KINDNESS, PLLC, 1420 FIFTH AVENUE, SUITE 2800, SEATTLE, WA, 98101-2347

CLMN Number of Claims: 22

ECL Exemplary Claim: 1

DRWN 7 Drawing Page(s)

LN.CNT 1522

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention provides a system and method for expressing a functional ABC (ATP-binding cassette) transporter in a host cell. A system comprises two or more expression vectors each comprising a nucleic acid molecule encoding one or more domains of the ABCR transporter gene and a means for expressing the nucleic acid molecule. Each expression vector of the system includes a nucleic acid molecule that encodes a domain that is functionally complementary to domains contained in the other expression vectors of the system but when taken together comprise the full ABCR transporter gene. Co-transfection of the expression vectors into a host cell provides co-expression of each of the domains of the protein which assemble to form an ABC transporter protein having functional characteristics of the full-length protein.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L8 ANSWER 7 OF 31 USPATFULL on STN

AN 2003:105884 USPATFULL

TI Methods for ameliorating ichthyosiform skin diseases

IN Steinert, Peter, Bethesda, MD, UNITED STATES

Marekov, Lyuben, Rockville, MD, UNITED STATES

Nemes, Zoltan, Debrecen, HUNGARY

PI US 2003072795 A1 20030417

AI US 2001-23275 A1 20011213 (10)

RLI Continuation of Ser. No. WO 2000-US17235, filed on 22 Jun 2000, PENDING

PRAI US 1999-140656P 19990623 (60)

DT Utility

FS APPLICATION

LREP KNOBBE MARTENS OLSON & BEAR LLP, 2040 MAIN STREET, FOURTEENTH FLOOR, IRVINE, CA, 92614

CLMN Number of Claims: 14

ECL Exemplary Claim: 1
DRWN 20 Drawing Page(s)
LN.CNT 2582

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to the discovery of a method to provide stabilized transglutaminase 1 enzyme, involucrin, and other molecules necessary for the assembly of the cell envelope to skin cells. Novel biological tools, prophylactics, therapeutics, cosmetics, and methods of use of the foregoing for study, prevention, and treatment of skin disorders are also disclosed.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L8 ANSWER 8 OF 31 USPATFULL on STN
AN 2003:86996 USPATFULL
TI Apolipoprotein A-I agonists and their use to treat dyslipidemic disorders
IN Dasseux, Jean-Louis, Mannheim, GERMANY, FEDERAL REPUBLIC OF
Sekul, Renate, Ladenburg, GERMANY, FEDERAL REPUBLIC OF
Buttner, Klaus, Epfenbach, GERMANY, FEDERAL REPUBLIC OF
Cornut, Isabelle, Edingen-Neckarhausen, GERMANY, FEDERAL REPUBLIC OF
Metz, Gunther, Edingen-Neckarhausen, GERMANY, FEDERAL REPUBLIC OF
PI US 2003060604 A1 20030327
AI US 2002-99574 A1 20020315 (10)
RLI Continuation of Ser. No. US 1999-465718, filed on 17 Dec 1999, PENDING
DT Utility
FS APPLICATION
LREP Pennie & Edmonds, LLP, 3300 Hillview Avenue, Palo Alto, CA, 94304
CLMN Number of Claims: 55
ECL Exemplary Claim: 1
DRWN 14 Drawing Page(s)
LN.CNT 6456

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention provides peptides and peptide analogues that mimic the structural and pharmacological properties of human ApoA-I. The peptides and peptide analogues are useful to treat a variety of disorders associated with dyslipidemia.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L8 ANSWER 9 OF 31 USPATFULL on STN
AN 2002:308509 USPATFULL
TI ADAM polynucleotides, polypeptides, and antibodies
IN Ruben, Steven M., Olney, MD, UNITED STATES
Ni, Jian, Germantown, MD, UNITED STATES
Hastings, Gregg A., Westlake Village, CA, UNITED STATES
Shi, Yanggu, Gaithersburg, MD, UNITED STATES
Wei, Ping, Brookeville, MD, UNITED STATES
PA Human Genome Sciences, Inc., Rockville, MD, UNITED STATES (U.S. corporation)
PI US 2002173640 A1 20021121
AI US 2002-125452 A1 20020419 (10)
RLI Continuation of Ser. No. US 2001-955504, filed on 19 Sep 2001, PENDING
Continuation of Ser. No. US 2000-712907, filed on 16 Nov 2000, PENDING
Continuation of Ser. No. WO 2000-US14308, filed on 25 May 2000, UNKNOWN
PRAI US 2000-234222P 20000921 (60)
US 1999-136388P 19990527 (60)
US 1999-142930P 19990709 (60)
US 2000-178717P 20000128 (60)
DT Utility
FS APPLICATION
LREP HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE, ROCKVILLE, MD, 20850
CLMN Number of Claims: 22
ECL Exemplary Claim: 1
DRWN 4 Drawing Page(s)

LN.CNT 13925

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to novel human ADAM polypeptides and isolated nucleic acids containing the coding regions of the genes encoding such polypeptides. Also provided are vectors, host cells, antibodies, and recombinant methods for producing human ADAM polypeptides. The invention further relates to diagnostic and therapeutic methods useful for diagnosing and treating disorders related to these novel human ADAM polypeptides.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L8 ANSWER 10 OF 31 USPATFULL on STN

AN 2002:259377 USPATFULL

TI Methods and compositions for inhibiting neoplastic cells growth

IN Yen, Frances, San Diego, CA, UNITED STATES

Denison, Blake, San Diego, CA, UNITED STATES

Bour, Barbara, San Diego, CA, UNITED STATES

Bihain, Bernard, Encinitas, CA, UNITED STATES

Edwards, Jean-Baptiste Dumas Milne, Paris, FRANCE

Duclert, Aymeric, Saint-Maur, FRANCE

Bougueleret, Lydie, Petit Lancy, SWITZERLAND

Ebbets-Reed, Dana, Encinitas, CA, UNITED STATES

Salter-Cid, Luisa, San Diego, CA, UNITED STATES

PI US 2002142949 A1 20021003

AI US 2000-751877 A1 20001228 (9)

DT Utility

FS APPLICATION

LREP GENSET, JOHN LUCAS, PHD, J.D., 10665 SORRENTO VALLEY RD, SAN DIEGO, CA, 92121

CLMN Number of Claims: 11

ECL Exemplary Claim: 1

DRWN 11 Drawing Page(s)

LN.CNT 11080

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention provides the genomic sequence of GSSP-2, GSSP-2 cDNAs and GSSP-2 polypeptides. Further the invention provides polynucleotides including biallelic markers derived from the GSSP-2 gene and from genomic regions flanking the gene. This invention also provides polynucleotides and methods suitable for genotyping a nucleic acid molecule containing sample for one or more biallelic markers of the invention. Further, the invention provides methods to detect a statistical correlation between a biallelic marker allele and a phenotype and/or between a biallelic marker haplotype and a phenotype. The invention also concerns methods and compositions for killing neoplastic cells or inhibiting neoplastic cell growth. In particular, the present invention concerns cell proliferation arresting/inhibiting and apoptosis/necrosis inducing compositions and methods for the treatment of tumors. The present invention is directed to novel polypeptides and to nucleic acid molecules encoding those polypeptides.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L8 ANSWER 11 OF 31 USPATFULL on STN

AN 2002:198415 USPATFULL

TI Encapsulation of compounds in vesicles

IN Callisen, Thomas Honger, Frederiksberg C, DENMARK

PA Novozymes A/S, Bagsvaerd, DENMARK (non-U.S. corporation)

PI US 2002106511 A1 20020808

AI US 2001-5321 A1 20011203 (10)

PRAI DK 2000-1810 20001201

US 2000-255268P 20001213 (60)

DT Utility

FS APPLICATION

LREP NOVOZYMES NORTH AMERICA, INC., 500 FIFTH AVENUE, SUITE 1600, NEW YORK,

NY, 10110
CLMN Number of Claims: 9
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 560

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Vesicles formed from synthetic polymers are used for encapsulation of compounds in order to protect the compounds from the chemical environment in which they are used.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L8 ANSWER 12 OF 31 USPATFULL on STN
AN 2002:12275 USPATFULL
TI Isolated cathepsin L type cysteine proteases and reducing intercorneocyte cohesion/promoting desquamation therewith
IN Bernard, Dominique, Paris, FRANCE
Kermici, Michel, Paris, FRANCE
Bernard-Bourboulon, Marie-Alix, Noisy Le Sec, FRANCE
PI US 2002006654 A1 20020117
AI US 2001-884953 A1 20010621 (9)
RLI Division of Ser. No. US 1998-143446, filed on 28 Aug 1998, GRANTED, Pat. No. US 6274364
PRAI FR 1997-10818 19970829
DT Utility
FS APPLICATION
LREP Norman H. Stepno, BURNS, DOANE, SWECKER & MATHIS, L.L.P., P.O. Box 1404, Alexandria, VA, 22313-1404
CLMN Number of Claims: 31
ECL Exemplary Claim: 1
DRWN 7 Drawing Page(s)
LN.CNT 899

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Isolated, substantially pure natural or synthetic polypeptides comprising cathepsin L type cysteine proteases, or polypeptide fragments or polypeptide admixtures obtained via proteolysis thereof, are useful for reducing intercorneocyte cohesion and, thus, for promoting desquamation.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L8 ANSWER 13 OF 31 USPATFULL on STN
AN 2002:246560 USPATFULL
TI Methods and compositions for inhibiting neoplastic cell growth
IN Edwards, Jean-Baptiste Dumas Milne, Paris, FRANCE
Duclert, Aymeric, Saint-Maur, FRANCE
Bougueleret, Lydie, PetitLancy, SWITZERLAND
Clusel, Catherine, Montreuil-sous-Bois, FRANCE
PA Genset S.A., Paris, FRANCE (non-U.S. corporation)
PI US 6455280 B1 20020924
AI US 2000-750580 20001228 (9)
RLI Continuation-in-part of Ser. No. US 2000-599362, filed on 21 Jun 2000
Continuation-in-part of Ser. No. WO 2000-IB1011, filed on 21 Jun 2000
Continuation-in-part of Ser. No. US 1999-469099, filed on 21 Dec 1999
Continuation-in-part of Ser. No. WO 1999-IB2058, filed on 20 Dec 1999
PRAI US 1999-141032P 19990625 (60)
US 1998-113686P 19981222 (60)
DT Utility
FS GRANTED
EXNAM Primary Examiner: Bansal, Geetha P.; Assistant Examiner: Davis, Natalie
LREP Lucas, John M., Follette, Peter, Voellmy, Lukas R.
CLMN Number of Claims: 2
ECL Exemplary Claim: 1
DRWN 11 Drawing Figure(s); 11 Drawing Page(s)
LN.CNT 10937

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention provides the genomic sequence of GSSP-2, GSSP-2 cDNAs and GSSP-2 polypeptides. Further the invention provides polynucleotides including biallelic markers derived from the GSSP-2 gene and from genomic regions flanking the gene. This invention also provides polynucleotides and methods suitable for genotyping a nucleic acid molecule containing sample for one or more biallelic markers of the invention. Further, the invention provides methods to detect a statistical correlation between a biallelic marker allele and a phenotype and/or between a biallelic marker haplotype and a phenotype. The invention also concerns methods and compositions for killing neoplastic cells or inhibiting neoplastic cell growth. In particular, the present invention concerns cell proliferation arresting/inhibiting and apoptosis/necrosis inducing compositions and methods for the treatment of tumors. The present invention is directed to novel polypeptides and to nucleic acid molecules encoding those polypeptides.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L8 ANSWER 14 OF 31 USPATFULL on STN

AN 2002:108624 USPATFULL

TI N-[1, (1-1) -dialkyloxy] - and N- [1, (1-1) -dialkenyloxy]-

alk-1-yl-N,N,N-tetrasubstituted ammonium lipids and uses therefor

IN Eppstein, Deborah A., 3401 Hillview Ave., P.O. Box 10850, Palo Alto, CA, United States 94303

Felgner, Philip L., 3401 Hillview Ave., P.O. Box 10850, Palo Alto, CA, United States 94303

Gadek, Thomas R., 3401 Hillview Ave., P.O. Box 10850, Palo Alto, CA, United States 94303

Jones, Gordon H., 3401 Hillview Ave., P.O. Box 10850, Palo Alto, CA, United States 94303

Roman, Richard B., 3401 Hillview Ave., P.O. Box 10850, Palo Alto, CA, United States 94303

PI US 6387395 B1 20020514

AI US 1994-348635 19941202 (8)

RLI Continuation of Ser. No. US 1994-237807, filed on 5 May 1994, now patented, Pat. No. US 5622712 Division of Ser. No. US 1993-15738, filed on 10 Feb 1993, now patented, Pat. No. US 5366737 Division of Ser. No. US 1990-614412, filed on 16 Nov 1990, now patented, Pat. No. US 5208036 Division of Ser. No. US 1990-524257, filed on 15 May 1990, now patented, Pat. No. US 5049386 Division of Ser. No. US 1989-428815, filed on 27 Oct 1989, now patented, Pat. No. US 4946787 Division of Ser. No. US 1987-114809, filed on 29 Oct 1987, now patented, Pat. No. US 4897355 Continuation-in-part of Ser. No. US 1986-877916, filed on 24 Jun 1986, now abandoned Continuation-in-part of Ser. No. US 1985-689407, filed on 7 Jan 1985, now abandoned

DT Utility

FS GRANTED

EXNAM Primary Examiner: Kishore, Gollamudi S.

CLMN Number of Claims: 26

ECL Exemplary Claim: 1

DRWN 3 Drawing Figure(s); 3 Drawing Page(s)

LN.CNT 3019

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB This invention relates to compounds of the formula ##STR1##

or an optical isomer thereof wherein R.sup.1 and R.sup.2 are the same or different and are an alkyl or alkenyl group of 6 to 24 carbon atoms; R.sup.3, R.sup.4 and R.sup.5 are the same or different and are alkyl of 1 to 8 carbon atoms, aryl, aralkyl of 7 to 11 carbon atoms, or when two or three of R.sup.3, R.sup.4, and R.sup.5 are taken together to form quinuclidino, piperidino, pyrrolidino, or morpholino; n is 1 to 8; and X is a pharmaceutically acceptable anion.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L8 ANSWER 15 OF 31 USPATFULL on STN
AN 2001:131083 USPATFULL
TI Isolated cathepsin L type cysteine proteases and reducing
intercorneocyte cohesion/promoting desquamation therewith
IN Bernard, Dominique, Paris, France
Kermici, Michel, Paris, France
Bernard-Bourboulon, Marie-Alix, Noisy le Sec, France
PA Societe L'Oreal S.A., Paris, France (non-U.S. corporation)
PI US 6274364 B1 20010814
AI US 1998-143446 19980828 (9)
PRAI FR 1997-10818 19970829
DT Utility
FS GRANTED
EXNAM Primary Examiner: Weber, Jon P.
LREP Burns, Doane, Swecker & Mathis, L.L.P.
CLMN Number of Claims: 11
ECL Exemplary Claim: 1
DRWN 10 Drawing Figure(s); 7 Drawing Page(s)
LN.CNT 837
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A cathepsin L type cysteine protease has been isolated from the healthy
stratum corneum of human skin. The protease has a pH optimum of 5 to 5.5
and mass of about 28 kDa.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L8 ANSWER 16 OF 31 USPATFULL on STN
AN 2000:174129 USPATFULL
TI Preparation for the application of agents in mini-droplets
IN Cevc, Gregor, Heimstetten, Germany, Federal Republic of
PA Idea AG, Munich, Germany, Federal Republic of (non-U.S. corporation)
PI US 6165500 20001226
AI US 1992-844664 19920408 (7)
PRAI DE 1990-4026834 19900824
DE 1990-4026833 19900824
DE 1991-4107153 19910306
WO 1991-EP1596 19910822
DT Utility
FS Granted
EXNAM Primary Examiner: Kishore, Gollamudi S.
LREP Davidson, Davidson & Kappel, LLC
CLMN Number of Claims: 35
ECL Exemplary Claim: 1
DRWN 31 Drawing Figure(s); 21 Drawing Page(s)
LN.CNT 4336
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The invention relates to a preparation for the application of agents in
the form of minuscule droplets of fluid, in particular provided with
membrane-like structures consisting of one or several layers of
amphiphilic molecules, or an amphiphilic carrier substance, in
particular for transporting the agent into and through natural barriers
such as skin and similar materials. The preparation contains a
concentration of edge active substances which amounts to up to 99 mol-%
of the agent concentration which is required for the induction of
droplet solubilization. Such preparations are suitable, for example, for
the non-invasive applications of antidiabetics, in particular of
insulin. The invention, moreover, relates to the methods for the
preparation of such formulations.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L8 ANSWER 17 OF 31 USPATFULL on STN
AN 97:73304 USPATFULL
TI Fibrinogen-coated liposomes

IN Retzinger, Gregory Scott, Cincinnati, OH, United States
Deanglis, Ashley P., Cincinnati, OH, United States
PA University of Cincinnati, Cincinnati, OH, United States (U.S.
corporation)
PI US 5658588 19970819
AI US 1995-414368 19950331 (8)
DT Utility
FS Granted
EXNAM Primary Examiner: Kishore, Gollamudi S.
LREP Frost & Jacobs
CLMN Number of Claims: 36
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 760

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A method for preparing fibrinogen-coated liposomes is disclosed. In this process, fibrinogen and an acylating agent are reacted in the presence of a dispersion of liposomes under specifically defined reaction conditions. The liposomes formed using this process, pharmaceutical compositions containing those liposomes, and the methods of clotting blood and delivering pharmaceutically-active agents and/or other chemicals utilizing those pharmaceutical compositions are also disclosed.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L8 ANSWER 18 OF 31 USPATFULL on STN
AN 97:33507 USPATFULL
TI N-[ω , (ω -1)-dialkyloxy]- and N-[ω , (ω -1)-dialkenyloxy]-alk-1-yl-N, N, N-tetrasubstituted ammonium lipids and uses therefor
IN Eppstein, Deborah A., Menlo Park, CA, United States
Felgner, Philip L., Los Altos, CA, United States
Gadek, Thomas R., Oakland, CA, United States
Jones, Gordon H., Cupertino, CA, United States
Roman, Richard B., Fairhope, AL, United States
PA Syntex (U.S.A.) Inc., Palo Alto, CA, United States (U.S. corporation)
PI US 5622712 19970422
AI US 1994-237807 19940504 (8)
RLI Division of Ser. No. US 1993-15738, filed on 10 Feb 1993, now patented, Pat. No. US 5336502 which is a division of Ser. No. US 1990-614412, filed on 16 Nov 1990, now patented, Pat. No. US 5208036 which is a division of Ser. No. US 1990-524257, filed on 15 May 1990, now patented, Pat. No. US 5049386 which is a division of Ser. No. US 1989-428815, filed on 27 Oct 1989, now patented, Pat. No. US 4946787 which is a division of Ser. No. US 1987-114809, filed on 29 Oct 1987, now patented, Pat. No. US 4897355 which is a continuation-in-part of Ser. No. US 1986-877916, filed on 24 Jun 1986, now abandoned which is a continuation-in-part of Ser. No. US 1985-689407, filed on 7 Jan 1985, now abandoned
DT Utility
FS Granted
EXNAM Primary Examiner: Azpuru, Carlos
LREP Heller Ehrman White & McAuliffe
CLMN Number of Claims: 7
ECL Exemplary Claim: 1
DRWN 3 Drawing Figure(s); 3 Drawing Page(s)
LN.CNT 3038

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB This invention relates to compounds of the formula ##STR1## or an optical isomer thereof wherein R.sup.1 and R.sup.2 are the same or different and are an alkyl or alkenyl group of 6 to 24 carbon atoms; R.sup.3, R.sup.4, R.sup.5 are the same or different and are alkyl of 1 to 8 carbon atoms, aryl, aralkyl of 7 to 11 carbon atoms, or when two or three of R.sup.3, R.sup.4, and R.sup.5 are taken together to form

quinuclidino, piperidino, pyrrolidino, or morpholino; n is 1 to 8; and X is a pharmaceutically acceptable anion.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L8 ANSWER 19 OF 31 USPATFULL on STN
AN 96:77939 USPATFULL
TI N-(1, (1-1)-dialkyloxy)-and N-(1, (1-1)-dialkenyloxy alk-1-yl-N,N,N-tetrasubstituted ammonium lipids and uses therefor
IN Eppstein, Deborah A., Menlo Park, CA, United States
Felgner, Philip L., Los Altos, CA, United States
Gadek, Thomas R., Oakland, CA, United States
Jones, Gordon H., Cupertino, CA, United States
Roman, Richard B., Fairhope, AL, United States
PA Syntex (U.S.A.) Inc., Palo Alto, CA, United States (U.S. corporation)
PI US 5550289 19960827
AI US 1995-415963 19950403 (8)
RLI Division of Ser. No. US 1994-237807, filed on 4 May 1994 which is a division of Ser. No. US 1993-15738, filed on 10 Feb 1993, now patented, Pat. No. US 5366737 which is a division of Ser. No. US 1990-614412, filed on 16 Nov 1990, now patented, Pat. No. US 5208036 which is a division of Ser. No. US 1990-524257, filed on 15 May 1990, now patented, Pat. No. US 5049386 which is a division of Ser. No. US 1989-428815, filed on 27 Oct 1989, now patented, Pat. No. US 4946787 which is a division of Ser. No. US 1987-114809, filed on 29 Oct 1987, now patented, Pat. No. US 4897355 which is a continuation-in-part of Ser. No. US 1986-877916, filed on 24 Jun 1986, now abandoned which is a continuation-in-part of Ser. No. US 1985-689407, filed on 7 Jan 1985, now abandoned
DT Utility
FS Granted
EXNAM Primary Examiner: Azpuru, Carlos
LREP Heller Ehrman White & McAuliffe
CLMN Number of Claims: 13
ECL Exemplary Claim: 1
DRWN 3 Drawing Figure(s); 3 Drawing Page(s)
LN.CNT 3043

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB This invention relates to compounds of the formula ##STR1## or an optical isomer thereof wherein R.sup.1 and R.sup.2 are the same or different and are an alkyl or alkenyl group of 6 to 24 carbon atoms; R.sup.3, R.sup.4 and R.sup.5 are the same or different and are alkyl of 1 to 8 carbon atoms, aryl, aralkyl of 7 to 11 carbon atoms, or when two or three of R.sup.3, R.sup.4, and R.sup.5 are taken together to form quinuclidino, piperidino, pyrrolidino, or morpholino; n is 1 to 8; and X is a pharmaceutically acceptable anion.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L8 ANSWER 20 OF 31 USPATFULL on STN
AN 96:72662 USPATFULL
TI N-[1, (1-1)-dialkyloxy]-and N-[1, (1-1)-dialkenyloxy]-alk-1-yl-n,n,n-tetrasubstituted ammonium lipids and uses therefor
IN Eppstein, Deborah A., Menlo Park, CA, United States
Felgner, Philip L., Los Altos, CA, United States
Gadek, Thomas R., Oakland, CA, United States
Jones, Gordon H., Cupertino, CA, United States
Roman, Richard B., Fairhope, AL, United States
PA Syntex (U.S.A.) Inc., Palo Alto, CA, United States (U.S. corporation)
PI US 5545412 19960813
AI US 1995-415962 19950403 (8)
RLI Division of Ser. No. US 1994-237807, filed on 4 May 1994 which is a division of Ser. No. US 1993-15738, filed on 10 Feb 1993, now patented, Pat. No. US 5366737 which is a division of Ser. No. US 1990-614412, filed on 16 Nov 1990, now patented, Pat. No. US 5208036 which is a

division of Ser. No. US 1990-524257, filed on 15 May 1990, now patented, Pat. No. US 5049386 which is a division of Ser. No. US 1989-428815, filed on 27 Oct 1989, now patented, Pat. No. US 4946787 which is a division of Ser. No. US 1987-114809, filed on 29 Oct 1987, now patented, Pat. No. US 4897355 which is a continuation-in-part of Ser. No. US 1986-877916, filed on 24 Jun 1986, now abandoned which is a continuation-in-part of Ser. No. US 1985-689407, filed on 7 Jan 1985, now abandoned

DT Utility
FS Granted
EXNAM Primary Examiner: Azpuru, Carlos
LREP Heller Ehrman White & McAuliffe
CLMN Number of Claims: 4
ECL Exemplary Claim: 1
DRWN 3 Drawing Figure(s); 3 Drawing Page(s)
LN.CNT 3017

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB This invention relates to compounds of the formula ##STR1## or an optical isomer thereof wherein R.sup.1 and R.sup.2 are the same or different and are an alkyl or alkenyl group of 6 to 24 carbon atoms; R.sup.3, R.sup.4 and R.sup.5 are the same or different and are alkyl of 1 to 8 carbon atoms, aryl, aralkyl of 7 to 11 carbon atoms, or when two or three of R.sup.3, R.sup.4, and R.sup.5 are taken together to form quinuclidino, piperidino, pyrrolidino, or morpholino, n is 1 to 8; and X is a pharmaceutically acceptable anion.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L8 ANSWER 21 OF 31 CAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 1
AN 2001:23423 CAPLUS
DN 134:315968
TI Triggered release of calcium from lipid vesicles: a bioinspired strategy for rapid gelation of polysaccharide and protein hydrogels
AU Westhaus, E.; Messersmith, P. B.
CS Biomedical Engineering Department, Northwestern University, Evanston, IL, 60208, USA
SO Biomaterials (2001), 22(5), 453-462
CODEN: BIMADU; ISSN: 0142-9612
PB Elsevier Science Ltd.
DT Journal
LA English
AB The bioinspired strategy of triggered release of Ca²⁺ from liposomal compartments was used to induce rapid gelation of polysaccharide and protein-based hydrogels. Thermally triggerable liposomes were designed by entrapping CaCl₂ within liposomes constructed of 90% dipalmitoylphosphatidylcholine and 10% dimyristoylphosphatidylcholine. These liposomes released greater than 90% of entrapped Ca²⁺ when heated to 37°C. A precursor fluid containing liposomes suspended in aqueous sodium alginate remained fluid for several days at room temperature but gelled rapidly when heated to 37°C, as a result of Ca²⁺ release and formation of crosslinked Ca-alginate. Alternatively, thermally triggered Ca²⁺ release from liposomes was used to activate enzyme-catalyzed crosslinking of proteins to form hydrogels. A mixture of Ca-loaded liposomes, fibrinogen, and a Ca²⁺-dependent transglutaminase enzyme (either human recombinant FXIII or guinea pig liver transglutaminase) remained fluid indefinitely when stored at room temperature, but gelled rapidly when heated to 37°C. SDS-PAGE of the reaction mixture revealed that gelation was due to enzymic crosslinking of the α and γ chains of fibrinogen, and oscillating rheometry revealed gel formation within 10 min of heating to 37°C. This new approach may be useful for developing rapidly gelling injectable biomaterials that can be stored at room temperature and injected in a minimally invasive manner into a body tissue or cavity, upon which rapid solidification would occur. This versatile bioinspired strategy could be utilized for the delivery of biomaterials for tissue repair and reconstruction, and local site-directed drug delivery.

RE.CNT 40 THERE ARE 40 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 22 OF 31 CAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 2
AN 2000:911405 CAPLUS
DN 134:68051
TI Ichthyosis skin diseases amelioration with transglutaminase 1
IN Steinert, Peter; Marekov, Lyuben; Nemes, Zoltan
PA Government of the United States of America, as Represented by the
 Secretary, Dept. of Health and Human Services, USA
SO PCT Int. Appl., 77 pp.
 CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2000078937	A1	20001228	WO 2000-US17235	20000622
	W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MY, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
	RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
	AU 2000057595	A5	20010109	AU 2000-57595	20000622
	US 2003072795	A1	20030417	US 2001-23275	20011213
PRAI	US 1999-140656P	P	19990623		
	WO 2000-US17235	W	20000622		

AB The present invention relates to a method to provide stabilized **transglutaminase 1** (TGase 1), involucrin, **synthetic lipid vesicle (SLV)**, and other mols. necessary for the assembly of the cell envelope to skin cells. A synthetic ceramide analog, 16-(16-hydroxyhexadecyl)oxyhecanecanoic acid (lipid Z) and delivery agents, are also included. Also disclosed a methods for lipid Z synthesis. A method of attaching involucrin, TGase 1, and lipid Z to SLV is claimed. A method and compns. for ameliorating autosomal recessive ichthyosis (ARI) skin diseases, are claimed. **Transglutaminases** (TGases) are defined as enzymes capable of forming isopeptide bonds by transfer of an amine onto glutaminy residues of a protein. Here we show that the membrane-bound form of the TGase 1 enzyme can also form ester bonds between specific glutaminy residues of human involucrin and a synthetic analog of epidermal specific ω -hydroxyceramides. The formation of a \approx 5-nm-thick lipid envelope on the surface of epidermal keratinocytes is an important component of normal barrier function. The lipid envelope consists of ω -hydroxyceramides covalently linked by ester bonds to cornified envelope proteins, most abundantly to involucrin. We synthesized an analog of natural ω -hydroxyceramides N-[16-(16-hydroxyhexadecyl)oxypalmitoyl]-sphingosine (lipid Z). When recombinant human TGase 1 and involucrin were reacted on the surface of **synthetic lipid vesicles** containing lipid Z, lipid Z was attached to involucrin and formed saponifiable protein-lipid adducts. By mass spectroscopy and sequencing of tryptic lipopeptides, the ester linkage formation used involucrin glutamine residues 107, 118, 122, 133, and 496 by converting the γ -carboxamido groups to lipid esters. Several of these residues have been found previously to be attached to ceramides in vivo. Mass spectrometric anal. after acetamide derivatization also revealed that ester formation involved primarily the ω -hydroxyl group of lipid Z. Our data reveal a dual role for TGase 1 in epidermal barrier formation and provide insights into the pathophysiol. of lamellar ichthyosis resulting from defects of TGase 1

enzyme. Protein.

RE.CNT 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 23 OF 31 CAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 3

AN 1999:265517 CAPLUS

DN 131:70250

TI Involucrin cross-linking by transglutaminase 1. Binding to membranes directs residue specificity

AU Nemes, Zoltan; Marekov, Lyuben N.; Steinert, Peter M.

CS Laboratory of Skin Biology, NIAMS, National Institutes of Health, Bethesda, MD, 20892-2752, USA

SO Journal of Biological Chemistry (1999), 274(16), 11013-11021
CODEN: JBCHA3; ISSN: 0021-9258

PB American Society for Biochemistry and Molecular Biology

DT Journal

LA English

AB The **transglutaminase 1** (TGase 1) enzyme is essential for the assembly of the cell envelope barrier in stratified squamous epithelia. It is usually bound to membranes, but to date most studies with it have involved solution assays. Here we describe an in vitro model system for characterizing the function of TGase 1 on the surface of **synthetic lipid vesicles (SLV)** of composition similar to eukaryote plasma membranes. Recombinant baculovirus-expressed human TGase 1 readily binds to SLV and becomes active in crosslinking above 10 μ M Ca^{2+} , in comparison to above 100 μ M in solution assays, suggesting that the membrane surface is important for enzyme function. Involucrin also binds to SLV containing 12-18% phosphatidylserine and at Ca^{2+} concns. above 1 μ M. In reactions of involucrin with TGase 1 enzyme in solution, 80 of its 150 glutamines serve as donor residues. However, on SLV carrying both involucrin and TGase 1, only five glutamines serve as donors, of which glutamine 496 was the most favored. As controls, there was no change in specificity toward the glutamines of other substrates used by free or SLV-bound TGase 1 enzyme. We propose a model in which involucrin and TGase 1 bind to membranes shortly after expression in differentiating keratinocytes, but crosslinking begins only later as intracellular Ca^{2+} levels increase. Furthermore, the data suggest that the membrane surface regulates the steric interaction of TGase 1 with substrates such as involucrin to permit specific crosslinking for initiation of cell envelope barrier formation.

RE.CNT 59 THERE ARE 59 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 24 OF 31 CAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 4

AN 1999:477718 CAPLUS

DN 131:268814

TI A novel function for transglutaminase 1: attachment of long-chain ω -hydroxyceramides to involucrin by ester bond formation

AU Nemes, Zoltan; Marekov, Lyuben N.; Fesus, Lazlo; Steinert, Peter M.

CS Laboratory of Skin Biology, National Institute of Arthritis and Musculoskeletal and Skin Diseases, National Institutes of Health, Bethesda, MD, 20892-2752, USA

SO Proceedings of the National Academy of Sciences of the United States of America (1999), 96(15), 8402-8407
CODEN: PNASA6; ISSN: 0027-8424

PB National Academy of Sciences

DT Journal

LA English

AB **Transglutaminases** (TGases) are defined as enzymes capable of forming isopeptide bonds by transfer of an amine onto glutaminy residues of a protein. Here we show that the membrane-bound form of the TGase 1 enzyme can also form ester bonds between specific glutaminy residues of human involucrin and a synthetic analog of epidermal specific ω -hydroxyceramides. The formation of a \approx 5-nm-thick lipid envelope on the surface of epidermal keratinocytes is an important

component of normal barrier function. The lipid envelope consists of ω -hydroxyceramides covalently linked by ester bonds to cornified envelope proteins, most abundantly to involucrin. We synthesized an analog of natural ω -hydroxyceramides N-[16-(16-hydroxyhexadecyl)oxypalmitoyl]-sphingosine (lipid Z). When recombinant human TGase 1 and involucrin were reacted on the surface of **synthetic lipid vesicles** containing lipid Z, lipid Z was attached to involucrin and formed saponifiable protein-lipid adducts. By mass spectroscopy and sequencing of tryptic lipopeptides, the ester linkage formation used involucrin glutamine residues 107, 118, 122, 133, and 496 by converting the γ -carboxamido groups to lipid esters. Several of these residues have been found previously to be attached to ceramides in vivo. Mass spectrometric anal. after acetonide derivatization also revealed that ester formation involved primarily the ω -hydroxyl group of lipid Z. Our data reveal a dual role for TGase 1 in epidermal barrier formation and provide insights into the pathophysiol. of lamellar ichthyosis resulting from defects of TGase 1 enzyme.

RE.CNT 45 THERE ARE 45 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 25 OF 31 CAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 5

AN 1997:422249 CAPLUS

DN 127:158324

TI Sphingosylphosphocholine reduces the calcium ion requirement for activating tissue transglutaminase

AU Lai, Thung-S.; Bielawska, Alicja; Peoples, Keith A.; Hannun, Yusuf A.; Greenberg, Charles S.

CS Department Medicine, Duke University Medical Center, Durham, NC, 27710, USA

SO Journal of Biological Chemistry (1997), 272(26), 16295-16300
CODEN: JBCHA3; ISSN: 0021-9258

PB American Society for Biochemistry and Molecular Biology

DT Journal

LA English

AB **Tissue transglutaminase (tTG)** catalyzes a Ca^{2+} -dependent **transglutaminase** reaction resulting in the formation of γ -glutamyl- ϵ -lysine bonds and is activated during apoptosis to catalyze the formation of apoptotic body. We investigate whether lipids that are membrane components and involved in cell signaling could modify the Ca^{2+} -dependent activation of tTG. We found that sphingosylphosphocholine (lyso-SM) was the only lipid to activate **transglutaminase** at low Ca^{2+} concns. In the presence of lyso-SM (125 μM), **transglutaminase** was detectable at 10 μM Ca^{2+} , whereas in the absence of lyso-SM, similar activity was obtained at 160 μM Ca^{2+} . Furthermore, in the presence of **lipid vesicles** lyso-SM retained the ability to enhance the Ca^{2+} -dependent activation of tTG. Lyso-SM did not significantly change the K_m for the glutamyl and primary amine substrates. However, the K_{act} for Ca^{2+} was reduced from 300 μM to 90 μM . Structure-function studies of lyso-SM analogs indicate that phosphocholine group on C1, the free amino group at C2 and a C4-C5 double bond are critical for the activation of **transglutaminase** activity. This is the first demonstration that a specific sphingolipid could enhance the activity of tTG and could play a role in vivo in activation of the tTG at physiol. Ca^{2+} levels.

L8 ANSWER 26 OF 31 CAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 7

AN 1995:267504 CAPLUS

DN 122:38704

TI Interaction of liposome-associated all-trans-retinoic acid with squamous carcinoma cells

AU Parthasarathy, Ranjani; Sacks, Peter G.; Harris, Daniel; Brock, Heidi; Mehta, Kapil

CS M. D. Anderson Cancer Center, University of Texas, Houston, TX, USA

SO Cancer Chemotherapy and Pharmacology (1994), 34(6), 527-34
 CODEN: CCPHDZ; ISSN: 0344-5704

DT Journal

LA English

AB Because of their antiproliferative and differentiation-inducing properties, retinoids have been used clin. as therapeutic and chemopreventive agents against squamous-cell carcinomas (SCC). As is the case for many therapeutic agents, however, the administration of retinoids is associated with toxic effects. Because encapsulation of certain drugs in **lipid vesicles** (liposomes) has been shown to result in reduced toxic effects, we studied the in vitro interaction of liposome-encapsulated all-trans-retinoic acid (L-ATRA) with a SCC line (MDA 886Ln) and its multicellular tumor spheroid (MTS) model. Various L-ATRA formulations were tested for incorporation of retinoic acid, toxic effects against human red blood cells, uptake and retention by tumor cells, and antiproliferative effects against SCC. Of the different formulations tested, L-ATRA containing diphosphatidylpalmitoylcholine (DPPC) and stearylamine (SA; 9:1, weight/weight) showed optimal drug incorporation, high stability, and minimal toxicity toward red blood cells and was highly efficacious in delivering ATRA and, thus, in inhibiting the growth of MDA 886Ln and its MTS model. DPPC: SA L-ATRA inhibited the expression of the enzyme keratinocyte **transglutaminase** in epidermal cells as effectively as did the free drug. These results suggest that liposomes can serve as an effective carrier system for the delivery of retinoids to SCC.

L8 ANSWER 27 OF 31 CAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 8

AN 1983:85115 CAPLUS

DN 98:85115

TI Formation of protein polymers in erythrocyte ghosts incubated with sonicated lipid vesicles. Effects on spectrin extractibility, permeability of ghosts to vesicles, intramembrane particle distribution and bleb formation

AU Alloisio, N.; Giraud, F.; Boutalbi, Y.; Chailley, B.; Delaunay, J.

CS Lab. Chim. Biol., Fac. Med. Grange-Blanche, Lyon, 69373, Fr.

SO Biochimica et Biophysica Acta (1983), 727(2), 255-65
 CODEN: BBACAQ; ISSN: 0006-3002

DT Journal

LA English

AB The incubation of human erythrocyte white ghosts with phosphatidylcholine (PC) vesicles or cholesterol/phosphatidylcholine (C/PC) vesicles under hypotonic or isotonic conditions generated membrane protein crosslinks. The latter appeared in the form of a high-mol. weight-polymer after SDS-polyacrylamide gel electrophoresis. The polymer started to develop within a few min of incubation, arising largely from spectrin, and required ≥ 24 h for completion. It occurred regardless of cholesterol depletion undergone by the ghosts in the presence of PC vesicles. It was not reversed upon further incubation in a hypotonic, vesicle-free medium. When initial incubation was carried out under hypotonic conditions, a number of other alterations were recorded: (1) spectrin extractibility was abolished; (2) ghosts became gradually impermeable to vesicles within a few h, a process referred to as slow resealing and generating an irreversible sequestration of the vesicles; (3) intramembrane particles aggregated and blebs free of intramembrane particles pinched off inward or outward. When initial incubation was conducted under isotonic conditions, the following was observed: (1) spectrin was unextractible, as could be expected; (2) vesicles did not enter the ghosts, a fact indicating an immediate and complete impermeabilization of ghosts to vesicles, a process referred to as fast resealing; (3) intramembrane particle aggregation and blebs free of intramembrane particles were also present. When initial incubation was performed under isotonic conditions, but in the absence of vesicles, the polymer failed to be associated with spectrin inextractibility. Evidently, **lipid vesicles** generate a high-mol.-weight polymer-associated, slow resealing of erythrocyte ghosts that differs, at least in part, from the

polymer-free, fast resealing induced by a vesicle-free isotonic medium. Resistance to β -mercaptoethanol of the polymer makes unlikely the sole participation of disulfide bonds. Absence of added Ca^{2+} in the medium is inconsistent with the **transglutaminase**-catalyzed formation of amide linkages. When ghosts were separated from the vesicles by a cellophane membrane upon hypotonic incubation, spectrin remained extractible and no polymer developed. Sonication of the vesicles under N and in the presence of butylated hydroxytoluene did not prevent the formation of the polymer.

L8 ANSWER 28 OF 31 SCISEARCH COPYRIGHT 2004 THOMSON ISI on STN
AN 2002:432184 SCISEARCH
GA The Genuine Article (R) Number: 553PN
TI Formation of fibrinogen-based hydrogels using phototriggerable
diplasmalogen liposomes
AU Zhang Z Y; Shum P; Yates M; Messersmith P B; Thompson D H (Reprint)
CS Purdue Univ, Dept Chem, W Lafayette, IN 47907 USA (Reprint); Northwestern
Univ, Dept Biomed Engn, Evanston, IL 60208 USA
CYA USA
SO BIOCONJUGATE CHEMISTRY, (MAY-JUN 2002) Vol. 13, No. 3, pp. 640-646.
Publisher: AMER CHEMICAL SOC, 1155 16TH ST, NW, WASHINGTON, DC 20036 USA.
ISSN: 1043-1802.

DT Article; Journal

LA English

REC Reference Count: 36

ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS

AB We report the triggered release of Ca^{2+} from liposomal compartments to induce rapid gelation of protein-based hydrogels. Phototriggerable liposomes were designed by entrapping CaCl_2 within liposomes composed of 38:57:5 dipalmitoylcholine (DPPC):distearylphosphatidylethanolamine (DSPC):bacteriochlorophyll (Bchl). These liposomes release > 80% of their entrapped Ca^{2+} within 15 min when irradiated at 800 nm (800 MW/cm²). A precursor solution, containing liposomes suspended in aqueous human fibrinogen and transglutaminase (TGase), remained fluid for several hours in the dark, but gelled rapidly when exposed to 800 nm excitation, as a result of photosensitized Ca^{2+} release and TG-induced fibrinogen cross-linking. TGase and hFXIII activities, determined using a fluorimetric dansylcadaverine assay, were found to depend strongly on irradiation time and reaction temperature. SDS-PAGE of the photolyzed reaction mixture revealed that gelation arises from enzyme-catalyzed cross-linking of predominately the alpha and gamma chains of fibrinogen. This approach to the phototriggered formation of protein hydrogels creates new opportunities for biomaterials applications in drug delivery, tissue engineering, and wound healing.

=> d bib abs 29-31

L8 ANSWER 29 OF 31 FEDRIP COPYRIGHT 2004 NTIS on STN
AN 2004:166767 FEDRIP
NR CRISP 2R01DE13030-05A1
TI Bioinspired Synthesis of In-Situ Gelling Biomaterials
SF Principal Investigator: MESSERSMITH, PHILLIP B; PHILM@NORTHWESTERN.EDU,
NORTHWESTERN UNIVERSITY, 2145 SHERIDAN ROAD
CSP NORTHWESTERN UNIVERSITY, CHICAGO, ILLINOIS
CSS Supported By: NATIONAL INSTITUTE OF DENTAL & CRANIOFACIAL RESEARCH
DB 2008 (/01/98)
FYR 2003
DE 2004 (/30/08)
FU Competing Continuation (Type 2)
FS National Institutes of Health
SUM DESCRIPTION (provided by applicant): **Transglutaminase** enzymes are ubiquitous Ca^{2+} -dependent enzymes that catalyze the formation of crosslinks between glutamine and lysine residues of proteins. Extensive **transglutaminase**-mediated crosslinking of soluble proteins is

believed to be responsible for rapid physical gelation of certain biological fluids. A common biological strategy for regulating the activity of **transglutaminase** enzymes is control of intracellular and extracellular Ca^{2+} concentration, mediated by lipid bilayer membranes. Stimuli-responsive **synthetic lipid vesicles** offer a unique opportunity to regulate **transglutaminase**-mediated gelation by sequestering and then releasing enzyme-activating ions such as Ca^{2+} . We hypothesize that Ca^{2+} release from temperature or light sensitive liposomes can be used to trigger TG-mediated crosslinking of peptide-modified polymers to form hydrogels suitable for use as tissue adhesives and for injectable tissue engineering. In this study, combinatorial chemistry will be employed to synthesize large peptide libraries from which short peptide substrates of **transglutaminase** enzymes will be identified. The peptide substrates will be covalently linked to biocompatible polymers, and the TG-catalyzed crosslinking of the polymers into hydrogels will be studied in an effort to formulate injectable solutions that undergo rapid gelation in situ. Stimuli-responsive liposomes will be utilized to trigger calcium activation of enzyme-catalyzed gelation with the goal of developing thermal and light triggered gelation for clinical use. The tissue adhesive potential of these hydrogels will be assessed by measuring the force required to separate articular cartilage surfaces bonded together by in-situ formed hydrogels, and in vitro and in vivo studies will be performed to evaluate the potential of chondrocyte-containing injectable polymer hydrogels to support the formation of cartilage tissue.

L8 ANSWER 30 OF 31 FEDRIP COPYRIGHT 2004 NTIS on STN
 AN 2004:151272 FEDRIP
 NR CRISP 1201AR41086-13
 TI Expression, Structure And Function Of The Cornified Cell
 SF Principal Investigator: STEINERT, PETER M
 CSS Supported By: NATIONAL INSTITUTE OF ARTHRITIS AND MUSCULOSKELETAL AND SKIN DISEASES
 FYR 2002
 FU Not Applicable
 FS National Institutes of Health
 SUM A major component of barrier function in stratified squamous epithelia is the cornified cell envelope (CE). This is a multi-component 10 nm thick layer of highly insoluble protein deposited on the inner surface of the plasma membrane of the cells during terminal differentiation. In the case of the epidermis, a 5 nm thick layer of ceramide lipids (lipid envelope) is attached to the exterior surface. The insolubility of the protein envelope is due in large part to the cross-linking of several structural by **transglutaminases**. Studies on the biology and assembly of the protein and lipid components are a major effort of this laboratory. Specifically, we are studying: (i) the cross-linking of proteins in CEs isolated from a variety of sources to explore which proteins are cross-linked together through which glutamines and lysines, and to provide information on structure and function; (ii) several key structural proteins such as loricrin, the small proline rich protein (SPR) families, involucrin, envoplakin and periplakin; (iii) the ceramide lipids which become covalently attached to the CE; (iv) the earliest stages of CE assembly produced in cultured keratinocytes; and (v) an attempt to recreate a CE-like structure using an in vitro **synthetic lipid vesicle (slv)** model system. CE protein envelope structure and assembly We are studying the features of CEs isolated from several sources, including human epidermis, cultured human epidermal keratinocytes induced to terminally differentiate, human oral epithelia, human uterine fluid material, and mouse inner root sheaths. We have used controlled proteolysis to dissect apart the CEs, separate cross-linked peptides, and perform protein sequencing. Together, our data are consistent with the possibility that CE assembly is initiated along the plasma membrane at interdesmosomal sites by head-to-head and head-to-tail cross-linking of involucrin to itself, and perhaps to envoplakin and periplakin. Shortly later, involucrin deposition spreads to

desmosomal sites so that a continuous layer of involucrin, envoplakin and perhaps periplakin is formed along the cell periphery: this layer perhaps forms a scaffold for the later stages of CE assembly involving substantial deposition of other proteins such as loricrin and SPRs. Loricrin We have expressed human loricrin in bacteria and used it to characterize its structure, biochemical properties, and cross-linking by epidermal **transglutaminases** (TGase) in vitro. By biophysical measurements it has some structure in solution associated with its multiple tyrosines. It is a complete TGase substrate because it is oligomerized by all three epidermal TGases in in vitro reactions, although with different kinetic efficiencies, and utilization of different glutamines and lysines. From comparisons of the residues used in vitro with those used in vivo from sequencing of CEs, we can conclude that both TGase 1 and TGase 3 are required for the correct cross-linking of loricrin in vivo. We have found that following cross-linking in vitro, loricrin becomes a compact near-spherical in shape and far more soluble. From this we can speculate that epidermal CEs contain about two layers of loricrin molecules. Further, the data suggest that preliminary cross-linking by the **transglutaminase** 3 enzyme may render the protein more soluble to allow translocation to the cell periphery where it is eventually attached to the growing CE structure. The proximal promoter of the human loricrin gene resides within the first 160 bp above the transcription initiation start site. Our data indicate that there are multiple positively- and negatively-interacting elements which confer tight epidermal specific expression on the loricrin gene during various stages of epidermal differentiation. Small proline rich proteins SPRs consist of four distinct families consisting of from one to 11 members. We have expressed one member of each of the human SPR1, SPR2 and SPR3 proteins for in vitro studies. By circular dichroism, they have little organized structure in solution. What structure is present can be attributed to the central proline-rich peptide repeats, and the signal strength is proportional to the number of repeats. The SPR proteins are also complete substrates in in vitro cross-linking reactions for the three TGases commonly expressed in the epidermis. In all cases of SPR proteins studied, the glutamines and lysines used for cross-linking are located only on the end domains, suggesting they may function as cross-bridging proteins. However, the details are different, which have provided a wealth of information on how the proteins may be used in tissues in vivo. Solution nmr structural studies on the SPR2 and 3 proteins have been performed. Unfortunately, these proteins have little organized structure in solution and only short range interactions were obtained. Nevertheless, the data suggest the central peptide repeat domains adopt novel omega-loop-like protein folds. We have explored the expression of the SPR1 and SPR2 families in mouse epithelia by use of immunocytochemistry, in situ hybridization and RT-PCR. Both families are differentially expressed in different epithelia. In the case of SPR1, the amount expressed in the epidermis varies widely with the site, from which we can conclude that the amounts of SPRs may influence the biomechanical properties of the epidermal body sites. Involucrin We have expressed and purified full-length human involucrin in bacteria and baculovirus systems and showed that it retains some but not all of its expected α -helical content. We have been successful in forming small crystals, minimally useful for Xray diffraction analyses, but improved conditions and larger crystals will be needed now to solve its three-dimensional structure. In addition, various modeling analyses have predicted that the central repeat motifs of members of the small proline rich family might associate with the repeat domain of involucrin. This model has several attractive features, in that it can explain the known in vivo and in vitro biochemical and cross-linking properties of both proteins. Experiments are in progress to test this possibility. Periplakin and Envoplakin These members of the plakin family are intimately involved in the earliest stages of CE assembly in epithelia. We have direct evidence that sequences on their tails are involved in cross-linking to keratin filaments, and other CE proteins, as well as attachment of ceramide lipids. In order to explore this further, we have expressed portions of the rods, tails and rods + tails of each protein.

Crystallization trials have been set up for periplakin in an effort to obtain three-dimensional structural information. Whereas periplakin alone is very soluble in physiological buffers, envoplakin is highly insoluble, but when mixed together, periplakin stabilizes envoplakin into a soluble oligomer (probably heterotetramer). Further, we have found that only intact forms of these two proteins bind to **synthetic lipid vesicles** and in a calcium dependent manner. Our data suggest that as soon as these proteins are expressed in epithelial cells, they will preferentially oligomerize and associate with plasma membranes. Further studies with **transglutaminase** cross-linking with **synthetic lipid vesicles** to investigate their possible roles in the earliest stages of CE assembly.

L8 ANSWER 31 OF 31 CIN COPYRIGHT 2004 ACS on STN
 AN 29(36):37006F CIN
 TI Government-Owned Inventions; Availability for Licensing
 SO Fed. Regist., 17 Aug 2000 (20000817), 65(160), p. 50206. ISSN: 0097-6326;
 CODEN: FEREAC.
 LA English
 AB The invention listed, Ichthyosiform Skin Diseases, is owned by agencies of the U.S. Government and is available for licensing in the U.S. in accordance with 35 U.S.C. 207 to achieve expeditious commercialization of results of federally-funded research and development. Many inherited autosomal recessive ichthyoses (ARI) are caused by improper or incomplete lipid barrier function in the skin . It is previously known that the mutations in the **transglutaminase 1** gene resulting in inactive enzyme is the cause of one ARI disease; lamellar ichthyosis. A principal function of the enzyme is to attach ceramide lipids for complete protein/lipid barrier function in the skin. This invention also describes how to: (1) Make large quantities of this enzyme that can be stored in a stable form ; (2) a simple way to make synthetic ceramide lipid analogs; and (3) make **synthetic lipid vesicles** that can carry, both the enzyme and synthetic ceramide so that it might be applied to affected ARI skin.

=> log y

COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	476.30	539.62
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL
	ENTRY	SESSION
CA SUBSCRIBER PRICE	-4.85	-4.85

STN INTERNATIONAL LOGOFF AT 11:39:28 ON 27 FEB 2004